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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/727,977

12/05/2003

Noboru Aoki

03280089 AA

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30743

7590

10/06/2008

WHITHAM, CURTIS & CHRISTOFFERSON & COOK, P.C.

11491 SUNSET HILLS ROAD

SUITE 340

RESTON, VA 20190

EXAMINER

THOMAS, ASHISH

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

10/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/727,977	Applicant(s) AOKI ET AL.	
	Examiner ASHISH K. THOMAS	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/29/2008 has been entered.

Response to Arguments

2. Applicant's arguments with respect to the independent claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kitagawa(U.S. 5,799,206).

Regarding claim 1, Kitagawa '206 discloses a printer comprising: a print unit that performs a print operation to print images on a recording medium based on operatable print data(**Network printer 120, stated in column 8, lines 52-57, reads on the print**

Art Unit: 2625

unit. As for the issue of operatable print data, this is inherently taught in the reference. If the print unit can successfully output the data, it then follows that the data must be operatable print data.); an error detecting unit that detects a predetermined error during the print operation, the predetermined error occurring when print data inputted into the printing unit is other than the operatable print data, the print operation being performable without change even if the error occurs, the predetermined error having a nature(**Column 21, lines 5-8 teaches that an error is detected. This implies the existence of the error detecting unit. As for the issue of detecting an error when the data is other than operatable print data, this is inherently taught in the reference as well. Note that an error is detected when there is some problem with respect to the printing operation. So, it follows that, when an error is detected, the detection is based on non-operatable print data that causes the error.);** a categorizing unit that categorizes the detected predetermined error into one of a plurality of given categories based on the nature, wherein each of said given categories includes a plurality of different predetermined errors from among the predetermined errors(**Column 21, lines 8-16 teaches a plurality of errors; the plurality of errors read on different categories of error.);** a setting unit that sets one error recovery method from among different error recovery methods for each of a plurality of error categories, the error recovery methods including an automatic print continuation and a recovery by user's operation(**Column 21, lines 8-27 teaches that there are two types of recovery methods-an automatic recovery method and a user intervention. The existence of the two types of recovery methods inherently**

Art Unit: 2625

teaches a setting unit that sets the type of recovery for each category of error.); a memory that stores a correspondence data indicating the set error recovery method of each error category(Column 21, lines 8-27 implies such a memory.); a method detecting unit that detects an error recovery method corresponding to the categorized error category with reference to the correspondence data stored in the memory(Column 21, lines 8-27 teaches the determination of a recovery method(i.e. automatic or user input). This implies the existence of a method detecting unit.); and an error recovery unit that executes an error recovery procedure according to the error recovery method detected by the method detecting unit(Column 21, lines 8-27 teaches a recovery step.).

Regarding claim 3, Kitagawa '306 further teaches that the memory is a nonvolatile memory(Column 21, lines 8-27).

Regarding claim 5, it is rejected in the same manner as claim 1. Note that claim 5 describes a storing medium storing a control program that corresponds to the functions of device claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitagawa(U.S. 5,799,206) in view of well known prior art(Official Notice).

Art Unit: 2625

Regarding claim 4, Kitagawa '206 teaches printer of claim 1. Note that Kitagawa '206 teaches a setting unit wherein a user can initially set the recovery method to be employed for each type of error category(**Column 21, lines 8-27**).

But Kitagawa '206 does not teach the printer further including an updating unit for receiving an updating instruction from the user and for updating the correspondence data in accordance with said updating instruction.

Print devices wherein a user can update certain settings are prevalent in the art(Official Notice).

Therefore, it would have been obvious for one of ordinary skill in the art, at the time of the present invention, to modify Kitagawa '206 with well known prior art to fully realize the device claimed in claim 4.

The motivation is to put forth a device that has a degree of flexibility when it comes to error recovery method settings. This way, a user has the flexibility to change recovery method settings in accordance with real-time changes.

5. Claims 2, and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitagawa(U.S. 5,799,206) in view of Kageyama(U.S. 5,625,757) and further in view of Kageyama(U.S. 6,504,619).

Regarding claim 2, Kitagawa '206 teaches printer according to claim 1.

But, Kitagawa '206 is silent on a display unit for displaying a message and an input unit for user to input various instructions, wherein: in response to the error recovery method detected by the method detecting unit being an automatic print continuation recovery method, the error recovery unit automatically executes an error

Art Unit: 2625

recovery procedure, displays an information on the display representing the error recovery procedure and, in response to receiving a continue command from a user within a given time window relative to the display, controls the printing unit to continue the print operation and, in response to not receiving the continue command from the user within the given time window, executing a skip printing procedure.

Kageyama '757, on the other hand, teaches a display unit for displaying a message(**Column 5, lines 7-13 teaches that a user is notified of the error.**) and an input unit for user to input various instructions(**Column 5, lines 53-55 teaches that a user instructs the print system. This implies the existence of the input unit.**), wherein: in response to the error recovery method detected by the method detecting unit being an automatic print continuation recovery method, the error recovery unit automatically executes an error recovery procedure, displays an information on the display representing the error recovery procedure and, in response to receiving a continue command from a user within a given time window relative to the display, controls the printing unit to continue the print operation and, in response to not receiving the continue command from the user within the given time window, executing a skip printing procedure. (**Column 5, lines 50-57 teaches a situation wherein, after the error recovery, a user inputs a re-print command. This inputted re-print command reads on the concept of continue command stated in the claim language. Furthermore, column 5, lines 27-29 teaches a method that reduces time via a faster processing.**)

Art Unit: 2625

Therefore, it would have been obvious for one of ordinary skill in the art, at the time of the present invention, to modify Kitagawa '206 with Kageyama '757 to partly put forth the device claimed in claim 2. The combination of Kitagawa '206 and Kageyama '757 would realize a printing system wherein automatic recovery is followed by a step wherein the user confirms continued printing of the print data.

The motivation behind this modification is to put forth a step that allows the user to observe the error recovery process and have more of an impact in the subsequent processes. This, in the end, will realize a system that caters more to the user, in that the user is permitted to confirm printing if he deems it okay.

Still, the combination of Kitagawa '206 and Kageyama '757 fails to teach a printer wherein the response to the error recovery method detected by the method detecting unit being a user operation recovery method the error recovery unit controls the display to display an error message and an operation guide message, prompting the user to input an instruction, and executes an error recovery procedure in accordance with the instruction from the user.

Kageyama '619, on the other hand, teaches a printer wherein the response to the error recovery method detected by the method detecting unit being a user operation recovery method the error recovery unit controls the display to display an error message and an operation guide message, prompting the user to input an instruction, and executes an error recovery procedure in accordance with the instruction from the user. **(Column 14, lines 33-52 teaches a situation wherein the user inputs instructions for the error recovery. This reads on the user operation recovery method.**

Art Unit: 2625

Furthermore, note that the operation guide message, stated in the claim language, is inherently taught in this portion of the reference.)

Therefore, it would have been obvious for one of ordinary skill in the art, at the time of the present invention, to modify Kitagawa '206 and Kageyama '757 with Kageyama '619 to fully put forth the device claimed in claim 2.

The motivation behind this modification quite simply is to put forth a step that permits the user to have a greater impact in the subsequent processes. Furthermore, the user input might be able to cure any deficiencies the automatic recovery is unable to cure.

Regarding claim 6, it is rejected in the same manner as claim 2. Note that claim 6 describes a storing medium storing a control program that corresponds to the functions of device claim 2.

Regarding claim 7, Kitagawa '206 discloses a printer enabling a user to set error recovery method for each error category(**Column 21, lines 8-27 teaches that there are two types of recovery methods-an automatic recovery method and a user intervention. The existence of the two types of recovery methods inherently teaches a setting unit that sets the type of recovery for each category of error.**) comprising: a printer controller that controls a print mechanism that performs a print operation to print images on a recording medium based on print data received from a host computer(**Network printer 120, stated in column 8, lines 52-57, reads on the print unit.**); the printer controller including a central processing unit (CPU)(**The CPU is inherently taught in column 21, lines 8-27. The controller cannot function without**

Art Unit: 2625

a processing unit. So, the CPU is inherently taught in column 21, lines 8-27.), a nonvolatile memory, and a random access memory (RAM)(The RAM is inherently taught in the reference as well. Note that printing devices have nonvolatile memory to store control programs(i.e. error recovery methods) and RAM for storing temporary data(i.e. the selected recovery method so that this selection is passed along to the host.).), the nonvolatile memory storing a print control program, an error recovery method selection program, an error recovery program, an error category definition file, and an error recovery method definition file(Column 21, lines 8-27 implies such the non-volatile memory and the processing units required to perform the error recovery method.), the CPU controlling various components of the printer according to the programs stored in the nonvolatile memory, the print control program storing a printing control procedure including an error recovery procedure, the error recovery method selection program allowing a user to select an error recovery method for each error category and updates the error recovery method definition file according to the error recovery method selected by the user(Column 21, lines 8-27, as stated above, teaches error recovery methods. So this, in turn, implies the setting of a recovery method for each type of error.), the error recovery program storing a procedure for, depending on an error category of a detected error, automatically executing an error recovery procedure(Column 21, lines 8-27 teaches an automatic recovery.) , the CPU detecting an error during the print operation based on the print data received from a host computer, determining an error category of the detected error and executing a procedure according to the determined error category.

Art Unit: 2625

(Column 21, lines 5-8 teaches that an error is detected, and column 21, lines 8-27 teaches a recovery step.)

But Kitagawa '206 does not disclose a user interactive input device with which a user can input various settings and instructions; and a display device for user interactive processing operations which displays various windows including an automatic print continuation setting window.

Kageyama '757, on the other hand, disclose a user interactive input device with which a user can input various settings and instructions; and a display device for user interactive processing operations which displays various windows including an automatic print continuation setting window. **(Column 5, lines 50-57 teaches a situation wherein, after the automatic error recovery, a user inputs a re-print command. This ability to input a re-print command implies the existence of the automatic print continuation window stated in the claim language.)**

Therefore, it would have been obvious for one of ordinary skill in the art, at the time of the present invention, to modify Kitagawa '206 with Kageyama '757 to partly put forth the device claimed in claim 7. The combination of Kitagawa '206 and Kageyama '757 would realize a printing system wherein automatic recovery is followed by a step wherein the user confirms continued printing of the print data.

The motivation behind this modification is to put forth a step that allows the user to observe the error recovery process and have more of an impact in the subsequent processes. This, in the end, will realize a system that caters more to the user, in that the user is permitted to confirm printing if he deems it okay.

Art Unit: 2625

Still, the combination of Kitagawa '206 and Kageyama '757 fails to teach an operation guide message window; and controlling the display device to display, on the operation guide message window, an error message and an operation guide message corresponding to the error category so as to prompt the user to input an instruction.

Kageyama '619, on the other hand, teaches an operation guide message window; and controlling the display device to display, on the operation guide message window, an error message and an operation guide message corresponding to the error category so as to prompt the user to input an instruction. **(Column 14, lines 33-52 teaches a situation wherein the user inputs instructions for the error recovery. This reads on the user operation recovery method. Furthermore, note that the operation guide message, stated in the claim language, is inherently taught in this portion of the reference.)**

Therefore, it would have been obvious for one of ordinary skill in the art, at the time of the present invention, to modify Kitagawa '206 and Kageyama '757 with Kageyama '619 to fully put forth the device claimed in claim 7.

The motivation behind this modification quite simply is to put forth a step that permits the user to have a greater impact in the subsequent processes. Furthermore, the user input might be able to cure any deficiencies the automatic recovery is unable to cure.

Regarding claim 8, the aforementioned combination of Kitagawa '206, Kageyama '757, and Kageyama '619 teaches the printer according to claim 7. Furthermore, Kitagawa '206 teaches error categories such as "sheet size mismatch

Art Unit: 2625

error", "font selection error", and "device configuration mismatch error", and "user data error". **(Column 21, lines 15-19 lists some examples of error categories. For example, they include font error, document error, emulation program error, and so on.)**

Regarding claim 9, the aforementioned combination of Kitagawa '206, Kageyama '757, and Kageyama '619 teaches the printer according to claim 8. Kitagawa '206 further teaches that the "sheet size mismatch error" occurs when the size of recording sheet mounted in the print mechanism does not agree with the size specified by the data received from the host computer(**Document error, stated in column 15-19 of Kitagawa '206, reads on this. Also note that column 2, lines 1-20 of Kageyama '757 talks about paper size.**), the "font selection error" occurs when the printer controller does not have a font whose attributes match the font attributes specified by the received data from the host computer(**The font error, stated in column 15-19 of Kitagawa '206, reads on this.**), the "device configuration mismatch error" occurs when the print mechanism cannot perform a print operation in a manner specified by the received data from the host computer for mechanical reasons, and the "user data error" occurs when received data from the host computer is in a data format that the printer cannot deal with or when a specified form overlay file is not provided in the printer. **(The emulation program error, stated in column 15-19 of Kitagawa '206, reads on both of these concepts.)**

Conclusion

Art Unit: 2625

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ASHISH K. THOMAS whose telephone number is (571)272-0631. The examiner can normally be reached on 9:00 a.m. - 5:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ashish K Thomas/
Examiner, Art Unit 2625

/David K Moore/
Supervisory Patent Examiner, Art Unit 2625

Application/Control Number: 10/727,977
Art Unit: 2625

Page 14